

exemplified by the simian cytochrome P450III A8 (SWISS-PROT Accession No. P33268). Table 12 indicates the comparison of the amino acid sequences between the human protein of the present invention (HP) (SEQ ID NO:11) and the simian cytochrome P450III A8 (CP) (SEQ ID NO:66). - represents a gap, * represents an amino acid residue identical to that in the protein of the present invention, and . represents an amino acid residue analogous to that in the protein of the present invention. The both proteins possessed a homology of 21.3% among the entire regions.--

The paragraph beginning on page 51, line 5 was replaced with the following rewritten paragraph:

-- The search of the protein data base using the amino acid sequence of the present protein revealed that the protein was analogous to the baker's yeast hypothetical membrane protein YML038c (NBRF Accession No. S49741). Table 13 indicates the comparison of the amino acid sequences between the human protein of the present invention (HP) (SEQ ID NO:13) and the baker's yeast hypothetical membrane protein YML038c (SC) (SEQ ID NO:67). - represents a gap, * represents an amino acid residue identical to that in the protein of the present invention, and . represents an amino acid residue analogous to that in the protein of the present invention. The both proteins possessed a homology of 26.3% among the N-terminal region of 281 amino acid residues.--

In the claims:

Claims 8, 10, 11, 20 and 24 have been cancelled without prejudice.

Claims 7, 9, 12-17 and 21 have been amended as follows:

7. (Amended) An isolated ~~nucleic acid molecule~~ polynucleotide comprising the nucleotide sequence set forth in SEQ ID NOs:19 or 37.

9. (Amended) An isolated ~~nucleic acid molecule encoding a polypeptide~~ polynucleotide sequence that encodes a protein comprising the amino acid sequence set forth in SEQ ID NO:1.

12. (Amended) An isolated nucleic acid molecule which hybridizes ~~to a nucleic acid molecule of any one of claims 7, 8, 9, 10 or 11~~ under ~~stringent~~ conditions at least as stringent as 1x SSC at 65 degrees C, or 1x SSC at 42 degrees C with 50% formamide, followed by washing at 65 degrees C on 0.3x SSC, to a complement of the polynucleotide havng the nucleotide sequence of SEQ ID NOs:19 or 27, said hybridizing polynucleotide having a length that is at least 25% of the length of the polynucleotide haing the nucleotide sequence of SEQ ID Nos: 19 or 27.

13. An isolated ~~nucleic acid molecule~~ polynucleotide comprising a nucleotide sequence which is complementary to the nucleotide sequence of the nucleic acid molecule of any one of claims 7, ~~8, 9, 10 or 11~~ or 9.

14. An isolated ~~nucleic acid molecule~~ polynucleotide comprising the ~~nucleic acid molecule~~ polynucleotide of any one of claims 7, ~~8, 9, 10 or 11~~ or 9, and a nucleotide sequence encoding a heterologous polypeptide.

15. An isolated ~~nucleic acid molecule~~ polynucleotide of claims 7, ~~8, 9, 10 or 11~~ or 9, wherein said ~~nucleic acid molecule~~ polynucleotide is operably linked to at least one expression control sequence.

16. (Amended) A process for producing a protein encoded by the ~~nucleic acid molecule~~ polynucleotide of claim 15, which comprises:

- (a) growing a culture of a host cell transformed with a vector comprising the polynucleotide of claim 15 in a suitable culture medium; and
- (b) purifying said protein from the culture.

17. A vector comprising the ~~nucleic acid molecule~~ polynucleotide of any one of claims 7, ~~8, 9, 10, or 11~~ or 9.

21. An isolated ~~The~~ polypeptide ~~of claim 20~~ comprising the amino acid sequence of SEQ ID NO:1.

APPENDIX B
CLAIMS PENDING

7. (Amended) An isolated polynucleotide comprising the nucleotide sequence set forth in SEQ ID NOs:19 or 37.

9. (Amended) An isolated polynucleotide sequence that encodes a protein comprising the amino acid sequence set forth in SEQ ID NO:1.

12. (Amended) An isolated polynucleotide which hybridizes under conditions at least as stringent as 1x SSC at 65 degrees C, or 1x SSC at 42 degrees C with 50% formamide, followed by washing at 65 degrees C on 0.3x SSC, to a complement of the polynucleotide having the nucleotide sequence of SEQ ID NOs:19 or 37, said hybridizing polynucleotide having a length that is at least 25% of the length of the polynucleotide having the nucleotide sequence of SEQ ID NOs:19 or 37.

13. (Amended) An isolated polynucleotide comprising a nucleic acid sequence which is complementary to the nucleotide sequence of the nucleic acid molecule of any one of claims 7 or 9.

14. (Amended) An isolated polynucleotide comprising the polynucleotide of any one of claims 7 or 9, and a polynucleotide encoding a heterologous polypeptide.

15. (Amended) An isolated polynucleotide of claims 7 or 9, wherein said polynucleotide is operably linked to at least one expression control sequence.

16. (Amended) A process for producing a protein encoded by the polynucleotide of claim 15, which comprises:

- (c) growing a culture of a host cell transformed with a vector comprising the polynucleotide of claim 15 in a suitable culture medium; and
- (d) purifying said protein from the culture.

17. (Amended) A vector comprising the polynucleotide of any one of claims 7 or 9.

18. The vector of claim 17, which is an expression vector.

19. A host cell transfected with the expression vector of claim 17.

21. (Amended) An isolated polypeptide comprising the amino acid sequence of SEQ ID NO:1.

22. The polypeptide of claim 21, further comprising heterologous amino acid sequences.

25. (New) A polynucleotide that encodes a protein that shares at least 85% sequence identity with the protein having the amino acid sequence of SEQ ID NO:1.

26. (New) A polynucleotide that encodes a protein that shares at least 95% sequence identity with the protein having the amino acid sequence of SEQ ID NO:1.